QUESTION FROM INDUSTRY DAY

Background: The NASA's Exploration Procurement Roadmap (page 8) indicates that operations activities, to support the flight test program and Orion/Ares flights, begins with preparations for Ares 1-Y (late FY13) and IOC is achieved with flight Or-2 (late FY14). The Integrated Processing on LC-39 (page 37) indicates that critical path operations begin post DDT&E (with Ares 1-Y or Or-2) first stage activities (in the ARF/PRF). These first stage operations begin L-10.5 months, and reach their peak during the 45 days leading up to launch.

The summary of Ground Operations (page 17), when read with respect to procurement roadmap and the integrated processing schedule, indicates during the period from FY10-FY14 the EGLS contractor will be performing development tasks consisting of supporting NASA in the development of the ground infrastructure (design, development, integration, test and evaluation); interfacing with the OEMs to ensure ground operations are considered in flight hardware designs and manufacturing; developing ground operations methodologies and implementation strategies.

Industry Question 1: The EGLS Scope Overview (Page 38) indicates the base content of EGLS is Offline Processing (Orion and First Stage); Integrated Operations; Launch Operations; Recovery Operations; Ground Support Equipment (GSE) O&M, Sustaining, Logistics; and Advanced Operations Planning. Page 38 does not reference EGLS support to ground system development (design, integration, test, evaluation, establish methodologies, implementation strategies) and design-for-operability consistent with pages 8, 17 and 37.

Does EGLS start as a development contract and transition into operations?

NASA Response 1: The Exploration Ground Launch Services (EGLS) will be the Space Operations Mission Directorate's ground, launch and recovery operations provider from contract start through completion. For ground systems, the EGLS contractor will support the development phase as the systems operator for validation, integration, test and evaluation. The EGLS contractor through its NASA counterparts will also interface with flight hardware manufacturers (OEMs), to ensure ground operations are considered in flight hardware designs and manufacturing for Ares I, Crew Exploration Vehicle, Ares V and Altair. The design and development of ground systems, as identified in Industry Day chart 17, is the responsibility of the KSC Ground Operations Project Office (LX) and will be performed in-house or through separate contracts, generally not as part of EGLS.

<u>Industry Question 2:</u> Do operations begin at the start of the processing flow for Ares 1-Y or Or-2?

NASA Response 2: EGLS operations will support Ares I-Y with the exception of Ares I First Stage offline processing. EGLS First Stage offline processing support will begin with Orion-2. Draft Performance Work Statement (PWS) section 2.8.1 outlines the schedule for First Stage processing activities.